

REMARKS

Claims 1-12 are pending. Claims 1-12 have been rejected.

The Examiner did not note any changes necessary to the drawings. However, as the drawings submitted were informal, Applicant will be submitting formal drawings under separate cover at a later time.

Claims 1-12 are rejected under 35 USC 103(a) as being unpatentable over "Multi-resolution backward video coding" (Beckman Institute for Advanced Science and Technology, Urbana, Illinois), 0-8186-7310-9/95 1995 IEEE by Aria Nosratinia et al. (Nosratinia), in view of Chen, et al (Chen).

As stated in the office action, Nosratinia does not teach band or phase shifting methods as required by claims 1 and 12, relying on Chen in the combination for this teaching. Chen is directed to quantization techniques for spectral data. Chen teaches phase shifting audio data and shifting video data. For audio data, the data is shifted in time, with the phase being temporal based. See Chen, column 11, lines 46-57. For video data, the data is shifted by adding or moving the data some number of row or columns of pixels. See Chen, column 12, line 60 through column 13, line 8.

Claims 1 and 12 have been amended for more clearly describe the nature of the band and phase shifting methods. As discussed in the instant application on page 3, line 25, through page 4, line 12, and page 5, lines 1-11. Band shifting is not shifting the data a number of rows or columns, but shifting a frequency-band coefficient up or down a sample, as examples. Phase shifting involved using a linear time-invariant filter to apply the odd or even phased data to the other 'portion' of the data being used.

It is therefore submitted that claims 1 and 12 are patentably distinguishable over the prior art and allowance of these claims is requested.

Further, the validity of the combination of references is questionable. Chen defines bands and phases in a way different from that of Nosratinia. It would not be obvious of one skilled in the art, working with the frequency band coefficients of Nosratinia to look to a reference in which the same terms have different definitions. Further, phase shifting in Chen is only discussed with regard to audio data, not video data. The block shifting of Chen is also not band shifting, but block shifting of the spatial blocks of the image.

Claims 2-11 depend from claim 1 and therefore inherently contain all of the requirements and limitations of the base claim, which is not shown by the prior art. Further, the prior art does not teach the further embodiments of the dependent claims.

It is therefore submitted that claims 2-11 are patentably distinguishable over the prior art and allowance of these claims is requested.

No new matter has been added by this amendment. Allowance of all claims is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Julie L. Reed

Julie L. Reed
Reg. No. 35,349

Customer No. 20575
MARGER JOHNSON & McCOLLOM
1030 SW Morrison Street
Portland, OR 97205
(503) 222-3613